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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,120	02/20/2004	Pieter Bots	NHL-NP-44	5247
432 7590 10/31/2007 NILS H. LJUNGMAN & ASSOCIATES P. O. BOX 130 GREENSBURG, PA 15601-0130			EXAMINER AHN, SANGWOO	
			ART UNIT 2166	PAPER NUMBER
			MAIL DATE 10/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/784,120

Applicant(s)

BOTS ET AL.

Examiner

Sangwoo Ahn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 26 - 33 and 41 - 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26 - 33 and 41 - 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/2007 has been entered.

### ***Response to Amendment***

Claims 26 – 33 and 41 – 52 are pending in this Office Action.

Claims 41 – 52 have been added.

Claims 26 and 28 have been amended.

Claims 1 – 25 and 34 – 40 have been canceled.

### ***Response to Arguments***

Applicant's arguments filed on 8/6/2007 have been fully considered but they are not persuasive.

Applicant alleges that Jones teaches that the button interface is used only to transmit data from a flash-memory card onto a removable media, not a computer. Examiner disagrees because Jones teaches that the CompactFlash reader can operate

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without a PC, but Jones never indicates that it must or always operates without a PC. In fact, Applicant's allegation is proved wrong by looking at column 4 lines 55 – 56, where it explicitly states that CompactFlash reader can be connected to the PC by a USB cable.

Applicant also argues that Jones' push button does not initiate a data exchange because the data exchange is initiated by a converter chip. Examiner disagrees because the button shown in Figure 9 element 79 activates the controller chip, which in turn initiates data exchange. Furthermore, Applicant argues that the button of Jones is only used to transfer data between the FlashToaster and a removable disk. Examiner also disagrees with this allegation because Jones does clearly teach that the data exchange can be accomplished between the FlashToaster and the PC in column 10 lines 1 – 5 (as well as between the FlashToaster and the removable mass storage), and even shows the connection between the two in Figure 9.

In response to applicant's argument that there is no reasonable expectation of success in combining Kokubun and Jones since the computer program in Kokubun and the converter chip in Jones cannot be combined without some sort of conflict, Examiner asserts that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Further, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubun in view of Jones.

Regarding claim 26, Kokubun discloses,

A method of monitoring and exchanging data between an external storage unit and a computer, said computer comprising a connection port (Figure 2, et seq.), said external data storage unit comprising a connecting device, an actuator, and a signal generator, said method comprising the steps of:

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running a program on said computer and monitoring, with said program, said connection port for a signal from said external data storage unit (paragraph 10 lines 5 – 6, paragraph 39 line 6, paragraph 41 line 4, et seq.);

operatively connecting said connecting device of said external data storage unit to said connection port of said computer (paragraph 10 lines 5 – 6, paragraph 39 line 6, et seq.);

signal generator in said external data storage unit and generating a signal (paragraph 41 line 4, et seq.);

detecting with said program the generated signal from said external data storage unit (paragraph 41 line 4, et seq.);

initiating with said program a data exchange between said external data storage unit and said computer in response to detection of said generated signal by said program (paragraph 10 lines 9 – 12, et seq.); and

exchanging data between said external data storage unit and said computer (paragraph 10 lines 9 – 12, et seq.).

Kokubun does not explicitly disclose “manually actuating, by a physical movement of a user of said actuator, independently of all other functions and functioning of said computer and subsequent to operatively connecting said external data storage unit to said computer.”

However, Jones discloses “manually actuating, by a physical movement of a user of said actuator, independently of all other functions and functioning of said computer and subsequent to operatively connecting said external data storage unit to said

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computer" in Figure 9 element 79 and column 10 lines 1 – 5, 26, 30 – 31. At the time of the present invention, it would have been obvious to a person of ordinary skill in the data processing art to combine the aforementioned references because Jones' pulse generator with a push button would have enabled Kokubun's overall system to provide a simple, time-saving user interface (which also provides a visual indication of the data copying progress) to operate the external data storage and initiate data transfer.

Regarding claim 27, Jones discloses the step of manually actuating said signal generator comprises executing a single, manual stroke (Figure 9:79 and column 10: 26, 30 – 31).

Claim 41 is rejected based on the same rationale discussed above.

Regarding claim 28, Jones discloses a push button and a single, manual stroke (Figure 9:79 and column 10: 26, 30 – 31).

Regarding claim 29, Kokubun discloses exchanging data packets (paragraph 10: 9 – 12, transferring data in packets is very well-known in the data processing art).

Claim 42 is rejected based on the same rationale discussed above.

Regarding claim 47, Kokubun discloses,

A method of monitoring and exchanging data between an external storage unit and a computer, said computer comprising a connection port (Figure 2, et seq.), said external data storage unit comprising a connecting device, an pushbutton actuator, a signal generator, said connecting device comprising one of : a USB cable, a FireWire cable, a CardBus, a PC Card, a parallel cable, a serial cable, or an infrared device

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(Figure 2: 14, et seq., use of these connecting devices are very well-known in the art), said method comprising the steps of:

running a program on said computer and monitoring, with said program, said connection port for a signal from said external data storage unit (paragraph 10 lines 5 – 6, paragraph 39 line 6, paragraph 41 line 4, et seq.);

operatively connecting said connecting device of said external data storage unit to said connection port of said computer (paragraph 10 lines 5 – 6, paragraph 39 line 6, et seq.);

signal generator in said external data storage unit and generating a signal (paragraph 41 line 4, et seq.);

detecting with said program the generated signal from said external data storage unit (paragraph 41 line 4, et seq.);

initiating with said program a data exchange between said external data storage unit and said computer in response to detection of said generated signal by said program (paragraph 10 lines 9 – 12, et seq.); and

exchanging data between said external data storage unit and said computer (paragraph 10 lines 9 – 12, et seq.).

Jones discloses “manually actuating, by a physical movement of a user of said actuator, independently of all other functions and functioning of said computer and subsequent to operatively connecting said external data storage unit to said computer” in Figure 9 element 79 and column 10 lines 1 – 5, 26, 30 – 31, “activating an optical



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indicator to provide a visual indication to a user that data is being exchanged, said optical indicator comprising a light-emitting device" in column 10 lines 25 – 40, et seq.

Regarding claim 48, Kokubun discloses exchanging data packets (paragraph 10: 9 – 12, transferring data in packets is very well-known in the data processing art).

Regarding claim 51, Kokubun discloses synchronizing data of a pre-defined hard drive area of said computer with data of said external data storage unit (Kokubun, paragraph 10: 9 – 12, 49: 1 – 7, et seq.), continuing monitoring with said program said connection port for an additional signal from said external data storage unit, and, upon the generation of a signal by manual actuation of said signal generator, detecting the signal in between the transfer of two sequential data packets (Kokubun, paragraph 41: 4 and Morioka, column 17 lines 35 – 39, et seq.).

Claim 52 is rejected based on the same rationale discussed above.

Claims 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubun and Jones, further in view of Morioka.

Regarding claim 30, Kokubun and Jones disclose the method as claimed in claim 29.

Kokubun and Jones do not explicitly disclose simultaneously controlling the exchange of data and monitoring and detecting an additional signal generated.

However, Morioka discloses the aforementioned feature in column 17: 35 – 39, et seq. At the time of the present invention, it would have been obvious to a person of ordinary skill in the data processing art to combine the references because Morioka's

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method of exchanging data and detecting signal simultaneously would have enabled the overall system to handle/transfer a very large volume of data in a short time, as taught by Morioka.

Claim 43 is rejected based on the same rationale discussed above.

Regarding claim 31, Kokubun, Jones and Morioka discloses,

during the exchanging of data, continuing monitoring with said program said connection port for an additional signal from said external data storage unit, and, upon the generation of a signal by manual actuation of said signal generator, detecting the signal in between the transfer of two sequential data packets (Kokubun, paragraph 41: 4 and Morioka, column 17 lines 35 – 39, et seq.); and

synchronizing data of a pre-defined hard drive area of said computer with data of said external data storage unit (Kokubun, paragraph 10: 9 – 12, 49: 1 – 7, et seq.).

Claim 44 is rejected based on the same rationale discussed above.

Regarding claim 32, Kokubun discloses,

said signal generator is accessed by said program in the stationary computer unit as a virtual drive, the virtual drive not being used as a traditional drive, but selected communication commands for the control of the virtual drive by the operating program are automatically transformed for monitoring a voltage pulse triggered at the pulse generator, wherein said signal generator is accessible as a virtual drive only by said program and is not integrated into the data storage administration of the stationary computer unit (paragraph 41, et seq.);

said connecting device comprises one of: a USB cable, a FireWire cable, a CardBus, a PC card, a parallel cable, a serial cable, or an infrared device, to permit connection with a corresponding connection port of a computer (Figure 2: 14, et seq., use of these connecting devices are very well-known in the art);

temporarily storing the signal generated by said signal generator as a change in a memory log in said data storage unit;

reading out the signal at a later point in time with said program; and

newly initializing said memory log with the read out (Figure 5, paragraph 54: 7 – 8, paragraph 65, et seq.).

Jones discloses,

activating an optical indicator to provide a visual indication to a user that data is being exchanged, said optical indicator comprising a light-emitting device (column 10 lines 25 – 40, et seq.).

Claim 45 is rejected based on the same rationale discussed above.

Regarding claim 49, Kokubun and Jones disclose the method as claimed in claim 48, but do not explicitly disclose simultaneously controlling the exchange of data and monitoring and detecting an additional signal generated.

However, Morioka discloses the aforementioned feature in column 17: 35 – 39, et seq.

Regarding claim 50, Kokubun discloses, during the exchanging of data, continuing monitoring with said program said connection port for an additional signal from said external data storage unit, and, upon the generation of a signal by manual

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actuation of said signal generator, detecting the signal in between the transfer of two sequential data packets (Kokubun, paragraph 41: 4 and Morioka, column 17 lines 35 – 39, et seq.); and

synchronizing data of a pre-defined hard drive area of said computer with data of said external data storage unit (Kokubun, paragraph 10: 9 – 12, 49: 1 – 7, et seq.).

Claims 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubun, Jones and Morioka, further in view of McFedries.

Regarding claim 33, Kokubun, Jones and Morioka discloses the method of claim 31 and,

Kokubun discloses,

said signal generator is accessed by said program in the stationary computer unit as a virtual drive, the virtual drive not being used as a traditional drive, but selected communication commands for the control of the virtual drive by the operating program are automatically transformed for monitoring a voltage pulse triggered at the pulse generator, wherein said signal generator is accessible as a virtual drive only by said program and is not integrated into the data storage administration of the stationary computer unit (paragraph 41, et seq.);

said connecting device comprises one of: a USB cable, a FireWire cable, a CardBus, a PC card, a parallel cable, a serial cable, or an infrared device, to permit connection with a corresponding connection port of a computer (Figure 2: 14, et seq., use of these connecting devices are very well-known in the art);

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temporarily storing the signal generated by said signal generator as a change in a memory log in said data storage unit;

reading out the signal at a later point in time with said program; and

newly initializing said memory log with the read out (Figure 5, paragraph 54: 7 – 8, paragraph 65, et seq.).

Jones discloses,

activating an optical indicator to provide a visual indication to a user that data is being exchanged, said optical indicator comprising a light-emitting device (column 10 lines 25 – 40, et seq.).

Kokubun, Jones and Morioka do not explicitly disclose external storage unit is integrated as an additional data storage drive into the data storage administration of the stationary computer unit.

However, McFendries discloses viewing removable storage and exploring the data contained therein via graphical user interface (Chapter 5, Figure 6.1, et seq.). It would have been obvious to a person of ordinary skill in the data processing art to combine the aforementioned references because McFedries' method of navigation would have enabled the overall system to keep user's data easy-to-find, well maintained and organized.

Claim 46 is rejected based on the same rationale discussed above.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sangwoo Ahn whose telephone number is (571) 272-5626. The examiner can normally be reached on M-F 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner Sangwoo Ahn  
AU 2166

10/18/2007 SW

  
**HOSAIN ALAM**  
**SUPERVISORY PATENT EXAMINER**